5.3 Biological Resources

5.3 BIOLOGICAL RESOURCES

This section describes the existing biological resources on the project site, and the potential adverse impacts associated with implementation of the proposed project. An analysis of compliance with all Federal, State, and local regulations and policies regarding biological resources has also been conducted. This section is primarily based upon the biological assessment of the project site (*Biological Constraints Analysis for the Seal Beach Project Site*, Harmsworth Associates, September 22, 2011). This section is also based upon the jurisdictional delineation of the project site (*Department of Water and Power Specific Plan Amendment Delineation of State and Federal Jurisdictional Waters*, RBF Consulting, June 24, 2011). The Biological Constraints Analysis and Jurisdictional Delineation are included in their entirety in Appendix 11.2, *Biological Constraints Analysis* and Appendix 11.3, *Delineation of State and Federal Jurisdictional Waters*.

5.3.1 EXISTING SETTING

BIOLOGICAL RESOURCES INFORMATION SOURCES

In addition to the site visit, field surveys, vegetation mapping, wildlife inventories, and habitat assessments, information on the biological resources of the project site was obtained by reviewing existing available data. Databases such as the California Natural Diversity Database (CNDDB 2011) and California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California were reviewed regarding the potential occurrence of any special status species or sensitive habitat within or in close proximity to the project site.

BIOLOGICAL ASSESSMENT METHODOLOGY

A floristic survey, vegetation mapping, and habitat assessment was conducted on May 2011, by Ms. Tara Schoenwetter of Harmsworth Associates. Floristic surveys were conducted to ensure the survey area was completely covered and consisted of systematic meandering transects across the entire project area at a distance that ensured complete visual coverage of the area. Each species encountered was identified to a taxonomic level necessary to determine if it was a species of interest (i.e., special status, native or non-native, or invasive plant species).

Vegetation types within the project site were mapped according to the state-wide Holland classification system. This system is roughly equivalent to mapping at the association level and consists of using the common name of the two most common species in the designation along with the vegetation type. Identification and mapping of vegetation also incorporated habitat descriptions provided by the more recent Manual of California Vegetation.

The habitat assessment for special status plant species was conducted concurrently with the vegetation mapping, and concentrated on habitats with the highest potential for yielding special status species, although all areas of the project site were studied. Each habitat within the study area was traversed on foot, examining the areas for particular features such as seeps, unique geologic types, exposures, etc., that would indicate the presence of a preferred habitat for special status plant species.

Field notes recorded included the date, location, habitat characteristics, associated plant composition, and other information pertinent to the CNDDB field survey data form. A general plant species list was compiled concurrently with the focused surveys. Scientific nomenclature in Hickman (1993) was used as the taxonomic resource; common names according to Roberts (1998), although several resources were consulted to identify plant species including CalFlora (2011) and CalPhotos (2011).

Field surveys for wildlife and habitat assessment for special status wildlife species were conducted on May 3, 2011 and June 2, 2011 by Mr. Paul Galvin of Harmsworth Associates. All portions of the site were traversed on foot to survey each vegetation community, look for evidence of wildlife presence, and conduct an assessment of potential habitat for special status species. Wildlife species were detected during the field surveys by sight, vocalizations, burrows, tracks, scat, scrapings, and other signs.

VEGETATION COMMUNITIES

The distribution of vegetation communities on the project site is illustrated on Exhibit 5.3-1, *Vegetation Communities*, and detailed in Table 5.3-1, *Summary of Vegetation Communities*. The site contains non-native grasslands (approximately 9.3 acres), exotic landscaping (approximately 0.2 acre), and developed/improved/other areas (approximately 1.3 acres). Off road vehicle use and disking of the non-native grassland area has resulted in a disturbed community. This disturbance regime has prevented shrubs or trees from establishing on the site.

Table 5.3-1
Summary of Vegetation Communities

Vegetation Community	Area (Acres)
Non-Native Grassland	9.3
Exotic Landscaping	0.2
Developed/Improved/Other	1.3
Total	*10.9*

Source: Harmsworth Associates, *Biological Constraints Analysis for the Seal Beach Project Site*, September 22, 2011.

Non-Native Grasslands

A total of approximately 9.3 acres of non-native grasslands occurs on the project site; refer to Exhibit 5.3-1 and Table 5.3-1. This vegetation community is equivalent to Semi-Natural Herbaceous Stands under Sawyer *et al.* 2009. Non-native grassland areas were dominated by European annual grasses, with a large component of ruderal forbs. Non-native grasslands are usually associated with wastelands, areas of historic grazing and off-road recreational vehicle use. Soils are generally fine textured, often clay, moist to wet in winter and dry in summer. These grasslands were dominated by wild oats (*Avena fatua*) and wild rye (*Lolium perenne*), with red brome (*Bromus madritensis*), soft chess (*Bromus hordeaceus*) and ripgut grass (*Bromus diandrus*) present throughout the site. There was no significant cover of natives. At the southeastern corner of the site (in Area 1), the non-native grassland occurred directly over beach sand and was dominated by Bermuda grass (*Cynodon dactylon*), with telegraph weed (*Heterotheca grandiflora*) and oats also present.

Source: Harmsworth Associates, September 2011.

NOT TO SCALE

RBF CONSULTING

11/11 • JN 10-107353

ENVIRONMENTAL IMPACT REPORT
DEPARTMENT OF WATER AND POWER SPECIFIC PLAN AMENDMENT

Vegetation Communities

Exhibit 5.3-1

Exotic Landscaping

A total of approximately 0.2 acre of exotic landscaping occurs at the project site (Areas 1 and 6); refer to Exhibit 5.3-1 and Table 5.3-1. This land cover type is not a vegetation community, since all species were planted, maintained, and generally required artificial watering to survive. At the northern extent of Area 1, the exotic vegetation included a variety of palms and medium sized non-native trees; at the south end towards the beach, the exotic vegetation consisted of ice plant (*Mesembryanthemum nodiflorum*) and some non-native grasses.

Developed/Improved/Other

A total of approximately 1.3 acres of developed, improved, and other areas occurs on the project site; refer to Exhibit 5.3-1 and Table 5.3-1. Disturbed areas are characterized as areas lacking vegetation. The developed areas include the single-family residence, and the paved driveway parcel, 1st Street right-of-way (ROW), and San Gabriel River Trail. The "other" area includes that portion of Area 4 located west of the San Gabriel River Trail; refer to the *Jurisdictional Waters and Wetlands* Section below.

PLANT INVENTORY

Plant species at the project site consisted of species associated with nonnative grassland and disturbed habitats. A total of 32 vascular plant species, representing 13 families were detected at the project site during the current surveys; refer to Appendix 11.2. Approximately 16 percent (five) of the plant species were native, while the remaining 27 species were exotic. The best represented plant families were Asteraceae (seven species) and Poaceae (11 species). Exotic invasive species (CalIPC 2011) documented onsite included garland chrysanthemum (*Chrysanthemum coronarium*) and giant reed (*Arundo donax*).

WILDLIFE OVERVIEW

Wildlife species at the project site consisted of species associated with nonnative grassland and disturbed habitats. Wildlife diversity was very low. Only 11 vertebrate species were detected, ten birds and one mammal; refer to Appendix 11.2). Bird species observed during the survey included rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), European starling (*Sturnus vulgaris*), house finch (*Carpodacus mexicanus*), and house sparrow (*Passer domesticus*).

The majority of the site is fenced and that may limit access for wildlife, but more importantly the surrounding areas are developed or marine environments. Other than coyote tracks, no burrows, tracks, or signs of wildlife were detected onsite. Marine birds such as doublecrested cormorants (*Phalacrocorax auritus*) and brown pelicans (*Pelecanus occidentalis*) were observed flying over the site but did not land on the site.

SPECIAL STATUS PLANTS, WILDLIFE, AND HABITATS

Special status species include those that are listed as rare, threatened, or endangered by either the California Department of Fish and Game (CDFG) or the United States Fish and Wildlife Service (USFWS); species that are candidates for either Federal or State listing; species designated as "fully protected" or "Species of Special Concern" by CDFG; and other species that are tracked by the CNDDB, but that do not fall into any of the other categories mentioned above. The special status species discussed below are listed as Federal or State Endangered or Threatened or California Species of Special Concern. These species have been afforded special recognition by local, State, or federal resource conservation agencies and organizations, principally due to the species' declining or limited population sizes usually resulting from habitat loss. Also discussed are habitats that are unique, of relatively limited distribution, or are of particular value to wildlife.

Special Status Plant Species

Based on a review of CNDDB, the CNPS Inventory of Rare and Endangered Vascular Plants of California (Tibor 2001, CNPS 2011), the site assessments, and field surveys, nine (9) special status plant species were identified as having some potential to occur on the project site; refer to Table 5.3-2, *Special Status Plant Species With Potential to Occur on the Project Site*. However, due to the regular site disking, historic disturbance, and the absence of suitable habitat surrounding the project site, all nine of these species are considered unlikely to occur onsite. In addition, there are no site records for any of these plant species and none were detected onsite during the current surveys.

Special Status Wildlife Species

Based on a review of CNDDB, literature reviews, field surveys, and assessments, eight (8) special status wildlife species were identified as having some potential to occur on the project site; refer to Table 5.3-3, *Special Status Wildlife Species With Potential to Occur on the Project Site*. However, due to the regular site disking, historic disturbance, and the absence of suitable habitat surrounding the project site, five of these species are considered unlikely to occur on the project site. Additionally, the potential exists for northern harrier (*Circus cyaneus*) and white-tailed kite (*Elanus leucurus*) to occur on the project site, but only for foraging, since no suitable nesting habitat occurs onsite.

As indicated in Table 5.3-3, the potential exists for California horned lark (*Eremophila alpestris actia*) to occur on the project site. The California horned lark is not listed as endangered, threatened, or rare under the FESA or CESA. The California horned lark is on the CDFG Watch List and CNDDB Ranked. In addition, there are no site records for any of these eight wildlife species and none were detected onsite during the current surveys.

Special Status Habitats

CNDDB and NCCP/HCP. The project site does not support plant communities that are considered sensitive by the CDFG's CNDDB due to their scarcity and/or because they support vascular plants and animals that are listed as endangered, threatened, or rare under the Federal Endangered Species Act (FESA) and/or California Endangered Species Act (CESA). As concluded in the Biological Constraints Analysis and Jurisdictional Delineation, there is no riparian habitat or other sensitive natural community present on the project site.

Table 5.3-2
Special Status Plant Species With Potential to Occur on the Project Site

Scientific Name/Family	Common Name	Status	Occurrence Onsite	Comments/Habitat
Atriplex coulteri *CHENOPODIACEAE*	Coulter's saltbush	Fed: None State: None CNPS: 1B.2	Unlikely, not detected during survey	Perennial herb that occurs in coastal strand, valley Grassland and coastal sage scrub communities in dune habitats. Blooms March-October.
Atriplex pacifica *CHENOPODIACEAE*	South Coast Saltbush	Fed: None State: None CNPS: 1B.2	Unlikely, not detected during survey	Annual herb found in Los Angeles to San Bernardino. Occurs in alkaline areas on sea cliffs and in coastal sage scrub. Blooms from March through October.
Atriplex parishii *CHENOPODIACEAE*	Parish's brittlescale	Fed: none State: none CNPS 1B.1	Unlikely, not detected during survey	Alkali vernal pools, alkali annual grassland, alkali playa and alkali scrub. Traver, domino and willows soils. Blooms from June through October.
Atriplex serenana var. davidsonii *CHENOPODIACEAE*	Davidson's saltscale	Fed: None State: None CNPS: 1B.2	Unlikely, not detected during survey	Annual herb that occurs in coastal Sage Scrub, wetland-riparian habitats along the coast. Blooms June-October.
Calandrinia maritime *PORTULACACCEAE*	Seaside Calandrinia	Fed: None State: None CNPS: none	Unlikely, not detected during survey	Annual herb found in coastal southern California. Occurs in sandy places, sea bluffs, coastal sage scrub. Blooms from March through May.
Centromadia parryi ssp. *Australis* ASTERACEAE	southern tarplant	Fed: None State: None CNPS: 1B.1	Unlikely, not detected during survey	Annual herb known to occur in coastal regions from San Diego to Santa Barbara. Occurs in marshes and swamps, in valley and foothill grasslands and in vernal pools. Blooms May-November.
Centromadia pungens ssp. Laevis *ASTERACEAE*	Smooth Tarplant	Fed: None State: None CNPS: 1B.1	Unlikely, not detected during survey	California endemic annual herb found only in Riverside, San Diego and San Bernardino Counties. Occurs on Alkaline soils in chenopod scrub, riparian woodland, meadows and seeps, playas and valley and foothill grassland below 480 meters. Blooms from April through September.
Holocarpha virgata ssp. Elongate ASTERACEAE	Graceful Tarplant	Fed: None State: None CNPS: 4.2	Unlikely, not detected during survey	Annual herb, found in San Diego. Occurs in Chaparral, Valley Grassland, Foothill Woodland, Coastal Sage Scrub Blooms from June through November.
Nemacaulis denudata var. *denudata* *POLYGONACEAE*	coast woolly-heads	Fed: None State: None CNPS: 1B.2	Unlikely, not detected during survey	Annual herb occurs in coastal dunes. Blooms April through September.

Definitions - status:
Fed = federal, FE = federal endangered, FT = federal threatened, FPE = federally proposed for listing as endangered, FPT = federally proposed for listing as threatened, FC = federal candidate species, FSC = federal special concern species, state = state of California, SE = state endangered, ST = state threatened, SCE = state candidate for listing as endangered, SCT = state candidate for listing as threatened, SC = state species of concern, FP = fully protected species, none = no federal or state listing, see Appendix C for CNPS Status.

Source: Harmsworth Associates, *Biological Constraints Analysis for the Seal Beach Project Site,* September 22, 2011.

Table 5.3-3
Special Status Wildlife Species With Potential to Occur on the Project Site

Scientific Name	Common Name	Status	Occurrence Onsite	Comments/Habitat
Ammodramus savannarum	grasshopper sparrow	ESA: None CESA: None DFG: CSC CNDDB Ranked	Unlikely	Grasslands.
Asio flammeus	short-eared owl	ESA: None CESA: None DFG: CSC CNDDB Ranked	Unlikely	Grasslands, open habitats.
Athene cunicularia	burrowing owl	ESA: None CESA: None DFG: CSC FW: BCC CNDDB Ranked	Unlikely	Grasslands, farmland and other open habitats.
Circus cyaneus	northern harrier	ESA: None CESA: None DFG: CSC CNDDB Ranked	Potential, non nesting only	Grassland, marshes, agricultural land, open areas in scrub and chaparral; ground or shrub nesting.
Elanus leucurus	white-tailed kite	ESA: None CESA: None DFG: FP CNDDB Ranked	Potential, non nesting only	Forages in grasslands; nests and roosts in oak and riparian woodland.
Eremophila alpestris actia	California horned lark	ESA: None CESA: None DFG: WL CNDDB Ranked	Potential	Open areas with little or no ground cover, such as grassland or ruderal vegetation.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	ESA: None CESA: None DFG: CSC CNDDB Ranked	Unlikely	Coastal sage scrub, grassland and chaparral.
Onychomys torridus ramona	southern grasshopper mouse	ESA: None CESA: None DFG: CSC CNDDB Ranked	Unlikely	Annual grassland and coastal sage scrub.

Definitions - status:
Fed = federal, FE = federal endangered, FT = federal threatened, FPE = federally proposed for listing as endangered, FPT = federally proposed for listing as threatened, FC = federal candidate species, FSC = federal special concern species, state = state of California, SE = state endangered, ST = state threatened, SCE = state candidate for listing as endangered, SCT = state candidate for listing as threatened, CSC = California species of special concern, FP = fully protected species, CNDDB = species listed under the states CNDDB program, none = no federal or state listing. Occurrence onsite: Occurs = known to occur onsite, potential = could occur due to presence of suitable habitat onsite but not detected during current survey, unlikely = probably does not occur due to limited suitable habitat onsite and not detected.

Source: Harmsworth Associates, *Biological Constraints Analysis for the Seal Beach Project Site,* September 22, 2011.

Critical Habitat. The term "critical habitat" applies to areas designated by the USFWS to be of biological importance to Federally-listed species. Critical habitat is represented by a specific geographic area that is considered to be essential for the conservation of a threatened or endangered species and, as such, may require special management and long-term protection. Areas that are not presently occupied by a Federally-listed species may be considered as critical habitat as such habitat may be necessary for the recovery of the species. An area is designated as "critical habitat" following publication of a proposed Federal regulation in the Federal Register and receipt and consideration of public comments on the proposal. The final boundaries of the critical habitat area are published in the Federal Register.

Federal agencies are required to consult with the USFWS on actions they carry out, fund, or authorize in order to ensure that such actions will not result in the destruction or adverse modification of established critical habitat. As such, areas designated as critical habitat are provided protection for the long-term conservation of the species; however, a critical habitat designation has no effect on actions where a Federal agency is not involved (i.e., federal funding or permitting).

There is no designated or proposed critical habitat within the project boundaries. Therefore, no further analysis is warranted in this regard.

NESTING AND MIGRATORY BIRDS

As indicated in Table 5.3-3, the potential exists for California horned lark (*Eremophila alpestris actia*) to occur on the project site. Additionally, the potential exists for northern harrier (*Circus cyaneus*) and white-tailed kite (*Elanus leucurus*) to occur on the project site, but only for foraging. Ten additional bird species were detected on the project site. Therefore, the project site has the potential to support migratory bird species, including both raptor and songbird species. Disturbing or destroying active nests is a violation of the Federal Migratory Bird Treaty Act. Nesting activity typically occurs from mid-February to mid-August.

JURISDICTIONAL WATERS AND WETLANDS

There are four (4) key agencies that regulate activities within coastal streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers' (USACE) Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the California Department of Fish and Game (CDFG) regulates activities under the Fish and Game Code Section 1600-1616, the Regional Water Quality Control Board (Regional Board) regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act, and the California Coastal Commission (CCC) regulates development activities pursuant to the California Coastal Act of 1976. A jurisdictional delineation of the project site was prepared in order to delineate the Corps, Regional Board (Santa Ana), CDFG, and CCC jurisdictional authority located within the project site.

Jurisdictional Delineation Methodology

The Jurisdictional Delineation analysis is supported by field surveys and verification of current conditions conducted on May 4, 2011. While in the field, jurisdictional areas were recorded onto a base map at a scale of one (1) inch = 100 feet using the topographic contours and visible landmarks as guidelines. Data points were obtained with a Trimble Geo XT Ground Positioning System (GPS) with ESRI Arc Pad 6.0/7.0, in order to record and identify specific ordinary high water marks (OHWM), soil pits, picture locations, and drainage features. This data was then transferred via USB port as a ".shp" file and added to the project's jurisdictional map.

Jurisdictional Areas

According to the Jurisdictional Delineation, state and federal jurisdictional areas were identified within the project site (Area 4). Area 4 (Bike Trail/River Parcel) includes a segment of the San Gabriel River Trail and extends into the San Gabriel River. The total on-site jurisdiction is outlined in Table 5.3-4, *Jurisdictional Areas*, illustrated on Exhibit 5.3-2, *Jurisdictional Map*, and further described below.

Table 5.3-4
Jurisdictional Areas (Acres)

Agency	Total Jurisdiction On-Site (Acres of "Waters/Wetlands")
U.S. Army Corps of Engineers	0.50
Regional Water Quality Control Board	0.50
California Department of Fish and Game	0.81
California Coastal Commission	0.81

Source: RBF Consulting, *Department of Water and Power Specific Plan Amendment Delineation of State and Federal Jurisdictional Waters*, June 24, 2011.

U.S. ARMY CORPS OF ENGINEERS DETERMINATION

Wetland Determination. An area must exhibit all three wetland parameters described in the USACE Regional Supplement to be considered a jurisdictional wetland. Based on the results of the site visit, it was determined that no portion of the project site exhibited all three parameters; therefore, no USACE jurisdictional wetlands are located onsite.

Non-Wetland Determination. Evidence of an OHWM was noted within the boundaries of the project site and consisted of a defined wrack line on the banks of the San Gabriel River. No additional areas within the project site exhibited an OHWM. Based on the site visit, approximately 0.50-acre of USACE's jurisdictional waters are located within the project site – all within the San Gabriel River.

REGIONAL WATER QUALITY CONTROL BOARD DETERMINATION

No isolated or Rapanos conditions were observed within the boundaries of the project site; therefore the Regional Board follows that of USACE jurisdiction.

NOT TO SCALE

RBF CONSULTING

11/11 • JN 10-107353

ENVIRONMENTAL IMPACT REPORT
DEPARTMENT OF WATER AND POWER SPECIFIC PLAN AMENDMENT

Jurisdictional Map

Exhibit 5.3-2

CALIFORNIA DEPARTMENT OF FISH AND GAME DETERMINATION

The San Gabriel River is considered a CDFG jurisdictional streambed. It is determined that approximately 0.81-acre of unvegetated CDFG jurisdictional streambed is located within the project site.

CALIFORNIA COASTAL COMMISSION DETERMINATION

The entire project site is located within the coastal zone. The on-site drainage (San Gabriel River) and associated streambed are considered coastal wetland due to hydrology. Based on the site conditions, approximately 0.81-acre of CCC jurisdictional waters are located within the boundaries of the project site.

WILDLIFE MOVEMENT CORRIDORS AND LINKAGES

The terms "wildlife corridors" and "linkages" are based upon fundamental ecological concepts, but can be easily misinterpreted because: 1) universally accepted definitions of these terms have not been established; 2) each term can be interpreted using different time scales (i.e., daily, seasonal, annual and evolutionary) and spatial scales (i.e., microclimate, local, community, and landscape) which changes their meaning; 3) the areas and values change from species to species; and, 4) the understanding of how these processes work is on-going and conclusions are subject to revision. The definitions provided in Biological Constraints Analysis Section 3.1 (refer to Appendix 11.2) are intended to provide a working understanding of corridors and linkages and are summarized from several sources.

No wildlife corridors or linkages are known at the project site. The surrounding area is developed and provides little opportunity for wildlife movement to or from the project site. No further analysis is warranted in this regard.

5.3.2 REGULATORY SETTING

Threatened and endangered species are listed by the USFWS and CDFG. In California, three agencies generally regulate activities within inland streams, wetlands, and riparian areas: USACE; the CDFG; and the RWQCB. The USACE Regulatory Branch regulates activities pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. The CDFG regulates activities under CDFG Code Sections 1600-1607. The RWQCB regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Act.

FEDERAL

Federal Endangered Species Act

The FESA of 1973 (50 CFR 17) is intended to protect plants and animals that have been identified as being at risk of extinction and classified as either threatened or endangered. FESA also regulates the "taking" of any endangered fish or wildlife species, per Section 9 of the Act. A responsible agency or individual landowners are required to submit to a formal consultation with the USWFS to assess potential impacts to listed species as the result of a development project, pursuant to FESA

Sections 7 and 10. The USFWS is required to make a determination as to the extent of impact to a particular species a project would have. If it is determined that potential impacts to a species would likely occur, measures to avoid or reduce such impacts must be identified.

Federal Clean Water Act

Section 404

The USACE maintains regulatory authority over the discharge of dredged or fill material into the waters of the United States, pursuant to Section 404 of the CWA. The USACE and U.S. Environmental Protection Agency (EPA) define "fill material" as any "material placed in waters of the United States where the material has the effect of: (i) Replacing any portion of a water of the United States with dry land; or (ii) Changing the bottom elevation of any portion of the waters of the United States." Fill material may include sand, rock, clay, construction debris, wood chips, or other similar "materials used to create any structure or infrastructure in the waters of the United States." The term "waters of the United States" includes the following:

- All waters that have, are, or may be used in interstate or foreign commerce (including sightseeing or hunting), including all waters subject to the ebb and flow of the tide;
- Wetlands;
- All waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds; the use, degradation or destruction of which could affect interstate or foreign commerce;
- All impoundments of water mentioned above;
- All tributaries of waters mentioned above;
- Territorial seas; and
- All wetlands adjacent to the waters mentioned above.

In the absence of wetlands, the USACE's jurisdiction in non-tidal waters extends to the OHWM, which is defined as *"…that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area (33 CFR 328.3(e))."*

Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are jointly defined by the USACE and EPA as *"those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3(b))."*

Section 401

The RWQCB is the primary agency responsible for protecting water quality in California. The RWQCB regulates discharges to surface waters under the Federal CWA and the California Porter-Cologne Water Quality Control Act. The RWQCB's jurisdiction extends to all waters of the State and to all waters of the United States, including wetlands (isolated and non-isolated conditions). Through 401 Certification, Section 401 of the CWA allows the RWQCB to regulate any proposed Federally-permitted activity that may affect water quality. Such activities include the discharge of

dredged or fill material, as permitted by the USACE, pursuant to Section 404 of the CWA. The RWQCB is required to provide "certification that there is reasonable assurance that an activity which may result in the discharge to waters of the United States will not violate water quality standards," pursuant to Section 401. Water Quality Certification must be based on the finding that proposed discharge will comply with applicable water quality standards, which are given as objectives in each of the RWQCB's Basin Plans.

In addition, pursuant to the Porter-Cologne Water Quality Control Act, the State is given authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if a Section 404 does not apply. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

Coastal Zone Jurisdictional Areas

A comprehensive classification system of wetlands and deepwater habitats (also referred to as the "Cowardin Wetland Classification System") was developed for the U.S. Fish and Wildlife Service (USFWS) in order to create the National Inventory of Wetlands. Under this hierarchical system, classification is based on hydrologic regime, vegetative community, and to a lesser extent on water chemistry and soils. The classification includes both wetlands and deepwater habitats. The Cowardin system includes several layers of detail for wetland classification. Overall, the Cowardin system and the USACE Section 404 regulations define wetlands differently. The most significant difference is that the Cowardin system defines wetlands to include mudflats and other wet areas that lack vegetation. According to the classification, the USFWS' definition of wetlands varies from the Coastal Act. The Coastal Act defines "wetlands" as "lands within the Coastal Zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." In addition, the Coastal Act defines environmentally sensitive areas in a manner that would include rivers, streams or other aquatic habitat.

STATE

California Endangered Species Act

The CESA of 1984, in combination with the California Native Plant Protection Act of 1977, regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the State. The State of California also lists Species of Special Concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. The CDFG is given the responsibility by the State to assess development projects for their potential to impact listed species and their habitats. State listed special-status species are also addressed through the issuance of a 2081 permit (Memorandum of Understanding).

California Fish and Game Code

Within the State of California, fish, wildlife, and native plant resources are protected and managed by the CDFG. The Fish and Game Commission and/or the CDFG are responsible for issuing

permits for the take or possession of protected species. The following sections of the Fish and Game Code address the protected species: Section 3511 (birds); Section 4700 (mammals); Section 5050 (reptiles and amphibians); and, Section 5515 (fish).

California Department of Fish and Game Lake and Streambed Alteration Agreements

Historically, the State of California regulated activities in rivers, streams, and lakes pursuant to *California Fish and Game Code* Sections 1600-1607; however, on January 1, 2004, legislation went into effect that repealed Fish and Game Code Sections 1600-1607 and instead, added *Fish and Game Code* Sections 1600-1616. This action eliminated the separation between private/public notifications (previously 1601/1603). Section 1602 of the *Fish and Game Code* requires any person, state, or local governmental agency, or public utility to notify the CDFG before commencing any activity that would result in one or more of the following:

- Substantially obstruct or divert the natural flow of a river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or,
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes within the State of California. While the jurisdictional limits are similar to the limits defined by USACE regulations, CDFG jurisdiction includes riparian habitat supported by a river, stream, or lake with or without the presence or absence of saturated soil conditions or hydric soils. CDFG jurisdiction generally includes to the top of bank of the stream, or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Any project that occurs within or in the vicinity of a river, steam, lake, or their tributaries typically requires notification of the CDFG, including rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life, and watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.

Migratory Bird Treaty Act of 1918

The Federal Migratory Bird Treaty Act (MBTA) was originally drafted to end the commercial trade in bird feathers popular in the latter part of the 1800s. The MBTA makes it illegal to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers, nests, eggs, or other avian products. The USFWS is responsible for enforcing the MBTA.

California Environmental Quality Act

In addition to specific Federal and State statutes for the protection of threatened and endangered species, *California Environmental Quality Act* (*CEQA*) *Guidelines* Section 15380(b) provides that a species not listed on the Federal or State list of protected species may be considered rare or endangered if it can be shown that the species meets certain specified criteria. Modeled after definitions in the FESA and the section of the *California Fish and Game Code* dealing with rare or endangered plants and animals, these criteria are given in *CEQA Guidelines* Section 15380(b). The

effect of Section 15380(b) is to require public agencies to undertake reviews to determine if projects would result in significant effects on species not listed by either the USFWS or CDFG (i.e., candidate species). Through this process, agencies are provided with the authority to protect additional species from the potential impacts of a project until the appropriate government agencies have an opportunity to designate the species as protected, if deemed appropriate.

NATURAL COMMUNITY CONSERVATION PLAN

The Natural Community Conservation Act (the Act), codified at Fish and Game Code Sections 2800-2840, authorizes the preparation of Natural Community Conservation Plans (NCCPs) to protect natural communities and species, while allowing a reasonable amount of economic development. The project site is not within the jurisdiction of any NCCP or Habitat Conservation Plan (HCP).

CITY OF SEAL BEACH EUCALYPTUS TREE ORDINANCE

Seal Beach Municipal Code Section 9.40.015, *Eucalyptus Tree Permit Requirement*, specifies the City's permit requirements involving eucalyptus trees. There are no eucalyptus trees located on the project site. Therefore, no further analysis is warranted in this regard.

5.3.3 IMPACT THRESHOLDS AND SIGNIFICANCE CRITERIA

The issues presented in the Initial Study Environmental Checklist (Appendix G of the *CEQA Guidelines*) have been utilized as thresholds of significance in this Section. Accordingly, biological resources impacts resulting from the implementation of the proposed project may be considered significant if they would result in the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Services (refer to Impact Statement BIO-1);

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Services (refer to Impact Statement BIO-2);

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (refer to Impact Statement BIO-3);

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (refer to Impact Statement BIO-4);

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (refer to Section 8.0, *Effects Found Not To Be Significant*); and

- Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (refer to Section 8.0, *Effects Found Not To Be Significant*).

CEQA Guidelines Section 15065(a), *Mandatory Findings of Significance*, states that a project may have a significant effect on the environment if it would have "... the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species ..."

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would substantially diminish, or result in the loss of, an important biological resource or those that would obviously conflict with local, State, or Federal resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse but not significant because, although they would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

CEQA Guidelines Section 15380, *Endangered, Rare or Threatened Species*, states that a lead agency can consider a non-listed species to be Rare, Threatened, or Endangered for the purposes of CEQA if the species can be shown to meet the criteria in the definition of Rare, Threatened, or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered according to the definitions for Rare, Threatened, and Endangered listed in CEQA Guidelines Section 15380.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.3.4 IMPACTS AND MITIGATION MEASURES

SPECIAL STATUS PLANT AND WILDLIFE SPECIES

BIO-1 PROJECT IMPLEMENTATION WOULD NOT HAVE AN ADVERSE EFFECT, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATIONS, ON SPECIES IDENTIFIED AS A CANDIDATE, SENSITIVE, OR SPECIAL STATUS.

Impact Analysis: The 2011 DWP Specific Plan Amendment proposes to amend the 1996 DWP SP boundaries and land use categories, as described in detail in Section 3.0, *Project Characteristics*. The 2011 DWP SP proposes 6.4 acres of open space and 4.5 acres of residential uses. The project

components also include a 48-lot residential subdivision (Tentative Tract Map (TTM) No. 17425), among others.

Special Status Plant Species

As indicated in Table 5.3-2, nine (9) special status plant species were identified as having some potential to occur on the project site. However, due to the regular site disking, historic disturbance, and the absence of suitable habitat surrounding the project site, all nine of these species are considered unlikely to occur onsite. In addition, there are no site records for any of these plant species and none were detected onsite during the current surveys. Therefore, project implementation would have a less than significant impact involving special status plant species.

Special Status Wildlife Species

Eight (8) special status wildlife species were identified as having some potential to occur on the project site; refer to Table 5.3-3. However, due to the regular site disking, historic disturbance, and the absence of suitable habitat surrounding the project site, five of these species are considered unlikely to occur on the project site. The potential exists for the California horned lark (*Eremophila alpestris actia*) to occur on the project site, however, none were detected onsite during the current surveys. Additionally, although the potential exists for northern harrier (*Circus cyaneus*) and white-tailed kite (*Elanus leucurus*) to occur on the project site, these occur only for foraging, since no suitable nesting habitat occurs onsite. Overall, there are no site records for any of these wildlife species and none were detected onsite during the current surveys. Therefore, project implementation would have a less than significant impact involving special status wildlife species.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

SENSITIVE NATURAL COMMUNITIES

BIO-2 PROJECT IMPLEMENTATION WOULD NOT HAVE AN ADVERSE EFFECT ON RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITY.

Impact Analysis: As concluded in the Biological Constraints Analysis and Jurisdictional Delineation, there is no riparian habitat, or other sensitive natural community present on the project site. Additionally, there is no designated or proposed critical habitat within the project boundaries. Therefore, implementation of the proposed project would result in no impact in this regard.

The site contains approximately 9.3 acres of non-native grassland, which is not a sensitive natural community. As indicated in Table 5.3-5, *Impacts to Vegetation Communities*, implementation of the proposed project would require removal of approximately 9.0 acres of non-native grasslands, in order to construct the proposed subdivision and park. This impact is considered less than significant, because non-native grassland is not a sensitive natural community. It is noted, Area 4 extends into the San Gabriel River and includes unvegetated streambed; refer to the *Jurisdictional Waters and Wetlands* Section below. No portion of Area 4, which includes approximately 0.4 acre of

non-native grasslands, would be impacted by project implementation because Area 4 is located outside of the proposed project development area. The project does not propose any improvements or alterations within Area 4. Overall, project implementation would have no impact upon riparian habitat or other sensitive natural community.

Table 5.3-5
Impacts to Vegetation Communities

Vegetation Community	Existing Area (Acres)	Impact Area (Acres)
Non-Native Grassland	9.3	9.0
Exotic Landscaping	0.2	0.2
Developed/ Improved/Other	1.3	0.6
Total	*10.9*	*9.8*

Source: Harmsworth Associates, *Biological Constraints Analysis for the Seal Beach Project Site*, September 22, 2011.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

JURISDICTIONAL WATERS AND WETLANDS

BIO-3 PROJECT IMPLEMENTATION WOULD NOT HAVE A SUBSTANTIAL ADVERSE EFFECT ON JURISDICTIONAL WATERS OR WETLANDS.

Impact Analysis: As outlined in Table 5.3-4 and illustrated on Exhibit 5.3-2, the following jurisdictional areas are present on the project site, specifically within Area 4:

- Approximately 0.50-acre of USACE jurisdictional waters;
- Approximately 0.50-acre of Regional Board jurisdictional waters;
- Approximately 0.81-acre of unvegetated CDFG jurisdictional streambed; and
- Approximately 0.81-acre of CCC jurisdictional waters.

Area 4 extends into the San Gabriel River, but it is located outside of the proposed project development area. The project does not propose any improvements or alterations within Area 4, which includes the jurisdictional areas. Based on a detailed review of current site conditions and project design plans, it is concluded that no USACE, Regional Board, or CDFG jurisdiction would be impacted as a result of project implementation. Additionally, no regulatory approvals from the USACE, Regional Board, or CDFG would be required. Therefore, project implementation would have no impact upon jurisdictional waters or wetlands. It is noted that no CCC waters/wetlands are located within the project site, the proposed project would require a Coastal Development Permit; refer to Section 5.1, *Land Use and Relevant Planning*.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

MIGRATORY BIRDS

BIO-4 IMPLEMENTATION OF THE PROPOSED PROJECT COULD INTERFERE WITH THE MOVEMENT OF A NATIVE RESIDENT OR MIGRATORY SPECIES.

Impact Analysis: The project site has the potential to support migratory bird species, including both raptor and songbird species. Disturbing or destroying active nests is a violation of the Federal Migratory Bird Treaty Act. Nesting activity typically occurs from mid-February to mid-August. The removal of vegetation during the breeding season is considered a potentially significant impact. Therefore, the project would be required to comply with Mitigation Measure BIO-1, which would be accomplished in one of two ways. First, efforts would be made to schedule all vegetation removal activities outside of the nesting season (typically February 15 to August 15) to avoid potential impacts to nesting birds. This would ensure that no active nests would be disturbed and that habitat removal could proceed rapidly. Second, if initial vegetation removal occurs during the nesting season, all suitable habitat would be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 100 feet (300 feet for raptors) would be delineated, flagged, and avoided until the nesting cycle is complete, as determined by the biological monitor, to minimize impacts. Therefore, with implementation of Mitigation Measure BIO-1, impacts to migratory birds would be reduced to less than significant levels.

Mitigation Measures:

BIO-1 To the extent feasible, all vegetation removal activities shall be scheduled outside of the nesting season (typically February 15 to August 15) to avoid potential impacts to nesting birds. However, if initial vegetation removal occurs during the nesting season, all suitable habitat shall be thoroughly surveyed for the presence of nesting birds by a qualified biologist prior to commencement of clearing. If any active nests are detected, a buffer of at least 100 feet (300 feet for raptors) shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the City.

Level of Significance: Less Than Significant With Mitigation Incorporated.

5.3.5 CUMULATIVE IMPACTS

- **PROJECT IMPLEMENTATION WOULD NOT HAVE AN ADVERSE EFFECT, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATIONS, ON SPECIES IDENTIFIED AS A CANDIDATE, SENSITIVE, OR SPECIAL STATUS.**

- **PROJECT IMPLEMENTATION WOULD NOT HAVE AN ADVERSE EFFECT ON RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITY.**

- **PROJECT IMPLEMENTATION WOULD NOT HAVE A SUBSTANTIAL ADVERSE EFFECT ON JURISDICTIONAL WATERS OR WETLANDS.**

- **IMPLEMENTATION OF THE PROPOSED PROJECT COULD INTERFERE WITH THE MOVEMENT OF A NATIVE RESIDENT OR MIGRATORY SPECIES.**

Impact Analysis: As concluded above, implementation of the proposed project would result in less than significant impacts to the special status plants and wildlife and a less than significant impact to the movement of a native resident or migratory species with implementation of the Mitigation Measure BIO-1. The development sites of the proposed cumulative projects are fully improved and located in urbanized areas. Therefore, project implementation would not result in cumulatively considerable impacts to biological resources. Notwithstanding, as with the proposed project, all future cumulative development would undergo environmental review on a project-by-project basis, in order to evaluate potential impacts to biological resources and ensure compliance with the established regulatory framework. Cumulative impacts to biological resources within the Cities of Seal Beach and Long Beach are currently being mitigated on a project-by-project basis.

Project implementation would have no impact upon riparian habitat or other sensitive natural community. Therefore, project implementation would not result in cumulatively considerable impacts to riparian habitats or other sensitive natural communities.

Project implementation would have no impact upon jurisdictional waters or wetlands. Therefore, project implementation would not result in cumulatively considerable impacts to jurisdictional waters or wetlands.

Mitigation Measures: Refer to Mitigation Measure BIO-1.

Level of Significance: Less Than Significant With Mitigation Incorporated.

5.3.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Biological impacts associated with project implementation would be less than significant with incorporation of the recommended mitigation measure. No significant unavoidable impacts to biological resources would occur.